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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/674,077	10/26/2000	Hideyuki Kimura	107714	1563

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EXAMINER

PATTERSON, MARC A

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/674,077

Applicant(s)

KIMURA ET AL.

Examiner

Marc A. Patterson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 12-14 and 21-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 12-14 and 21-23 is/are rejected.
- 7) ☒ Claim(s) 1-6, 12-14 and 21-23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

WITHDRAWN REJECTIONS

1. The 35 U.S. C. 103(a) rejection of Claims 1 – 2 and 21 – 22 as being unpatentable over Suzuki et al (Japanese Patent No. 6246777), of record on page 2 of the previous Action, is withdrawn.
2. The 35 U.S. C. 103(a) rejection of Claims 3 – 6, 12 – 14 and 23 as being unpatentable over Suzuki et al (Japanese Patent No. 6246777) in view of Asasi Chemical (Japanese Patent No. 03286815), of record on page 4 of the previous Action, is withdrawn.

NEW REJECTIONS

Claim Objections

3. Claims 1 – 6, 12 – 14 and 21 – 23 are objected to because of the following informalities:
The meaning of the phrase ‘barrel portion’ is unclear because the relationship between the cylindrical molded body and the barrel portion is unclear. For purposes of examination, the phrase ‘barrel portion’ will be interpreted to mean the outer surface of the cylindrical molded body. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 – 2 and 21 – 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Hirata et al (U.S. Patent No. 5,193,711).

With regard to Claim 1, Hirata et al disclose body which is molded and is a container (column 4, lines 53 – 55) and cylindrical (circular; column 5, lines 65 – 66) and therefore has an inner surface and an outer surface, and comprises a sheet shaped insert, which is a label which is forced between a core and a cavity of a mold, and therefore inserted between the core and cavity (column 5, lines 41 – 45) having an upper end (the label has a lower end, and therefore an upper end; column 5, lines 41 – 45); resin is injected into the space between the core and the cavity is unified with the insert, allowing the insert to be bonded to the outer side of the wall of the body (column 5, lines 41 – 45), therefore bonded to the outer surface of the body; the body is therefore insertion molded; the resin is injected (injection resin is introduced; column 5, lines 32 – 34) at the bottom section of the insert (column 5, lines 34 – 37; Figure 3A), therefore inwardly apart from the upper end of the insert in an axial direction and at a position corresponding to a position on the inner surface that is covered by the insert, and the mark of an injection gate is therefore positioned inwardly apart from the upper end of the insert in an axial direction and at a position corresponding to a position on the inner surface that is covered by the insert.

With regard to Claim 2, Hirata et al disclose a gap on the outer surface positioned between opposed ends of the insert and not covered by the insert (between sidewall sections of the insert as shown in Figure 3; column 4, lines 56 – 60).

With regard to Claim 21, the insert disclosed by Hirata et al is bonded to the outer surface of the body, as stated above, and therefore has an inner surface bonded to the outer surface of the body and an outer surface opposite the inner surface.

With regard to Claim 22, resin is only introduced at the bottom section of the insert as shown in Figure 3A (column 5, lines 34 – 37), the mark of an injection gate is therefore positioned only inwardly apart from the upper end of the insert in an axial direction and at a position corresponding to a position on the inner surface that is covered by the insert.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3 – 6, 12 – 14 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirata et al (U.S. Patent No. 5,193,711) in view of Suzuki et al (Japanese Patent No. 6246777) and Asahi Chemical (Japanese Patent No. 03286815).

Hirata et al disclose an insertion and injection molded article comprising an insert and injected resin as discussed above. The mold comprises a mold cavity, therefore an outer mold unit, and core, as discussed above, therefore a core shaped to be inserted and fitted into the outer mold unit, and a cavity between the outer mold unit and the core; the core also comprises an injection gate opening (groove; column 6, lines 65 – 67); the insert is placed between the core

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and cavity, as discussed above, and is therefore fitted attached and held along the inner surface, and resin is injected toward the molded body inner surface; the insert is also pushed onto the inner surface with the resin (the resin forces the side wall section against the cavity side; column 5, lines 49 – 52) and therefore shapes the resin. With regard to Claims 3 and 23, Hirata et al fail to disclose a core which is a pull – out mold unit and a resin which is cured following injection.

Suzuki et al teach the use of a mold unit which is a pull – out mold unit (pulled out of the space; paragraph 0025, English translation) for injection molding, for the purpose of molding a container (paragraph 0004, English translation). One of ordinary skill in the art would therefore have recognized the advantage of providing for the pull – out mold unit of Suzuki et al in Hirata et al, which comprises insertion and injection molding, depending on the desired adhesion to both layers of the end product.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for a pull – out mold unit, therefore a core which is a pull – out mold unit, in Hirata et al in order to obtain a container as taught by Suzuki et al.

Asahi Chemical teaches that thermoplastic resins and thermosetting resins are used alternatively in the making of containers for the purpose of making a container having a good appearance (English Abstract). Therefore, one of ordinary skill in the art would have recognized the utility of providing for the thermosetting resin taught by Asahi Chemical, rather than a thermoplastic resin, in Suzuki et al, which is a container, depending on the desired surface appearance of the end product as taught by Asahi Chemical.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for a thermosetting resin in Suzuki et al in order to make a container having a good appearance as taught by Asahi Chemical, thus providing for a resin which continuously cures throughout the molding process of Suzuki et al including the step following injection.

With regard to Claim 4, as stated above, Hirata et al disclose a gap on the outer surface positioned between opposed ends of the insert and not covered by the insert; molten resin is therefore not injected toward the gap.

With regard to Claims 5 and 12, a knock out pin is provided in the core disclosed by Suzuki et al (ejection pin; paragraph 0011, English translation), and the Suzuki et al further disclose pulling out the pull – out mold unit of the outer mold unit after insertion molding (paragraph 0025, English translation) and cutting a connection between the cured resin inside an injection gate opening and a molded body by raising the knock - out pin (the ejection pin is raised, eliminating thermoplastics remaining between the core and runner, thus cutting the connection between molded body and the knock - out pin; paragraph 0011 , English translation) and removing the body by pushing the bottom portion of the body (the fabricated compound container is taken out from the core by moving upwards the stripper plate with which its bottom portion is in contact (paragraph 0022., English translation; Figure 9).

With regard to Claims 6 and 13 – 14, as discussed above, the insert disclosed by Hirata et al is fitted, attached and held in a cylindrical shape along the inner surface of the outer mold unit; the mold unit is a pull - out mold unit as discussed above, and a contact frictional force is

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therefore applied by placing the insert in a cylindrical shape into the outer mold unit while the core of the injection molding mold is pulled out from the outer mold unit.

ANSWERS TO APPLICANT'S ARGUMENTS

8. Applicant's arguments regarding the 35 U.S. C. 103(a) rejection of Claims 1 – 2 and 21 – 22 as being unpatentable over Suzuki et al (Japanese Patent No. 6246777) and 35 U.S. C. 103(a) rejection of Claims 3 – 6, 12 – 14 and 23 as being unpatentable over Suzuki et al (Japanese Patent No. 6246777) in view of Asasi Chemical (Japanese Patent No. 03286815), of record in the previous Action, have been considered and have been found to be persuasive. The rejections are therefore withdrawn. The new rejections above are directed to Claims 1 – 6, 12 – 14 and 21 – 23.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc A Patterson whose telephone number is 571-272-1497.

The examiner can normally be reached on Mon - Fri 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marc Patterson 10/17/05

Marc A. Patterson, PhD.
Examiner
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